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REMARKS/ARGUMENTS

In light of the Advisory Action mailed February 17, 2006, the Applicant presents the following amendments and remarks, and earnestly solicits re-examination and reconsideration of this application, withdrawal of the rejections, and formal notification of the allowability of all claims as presented. As detailed in the Office Action mailed November 22, 2005, Claims 1-20 are pending, wherein Claims 1-20 have been rejected. In response to the Office Action, the Applicant traverses the rejections of Claims 1-20, as discussed below in further detail, but has amended Claims 1, 11, and 18, and cancelled Claim 5 (incorporated into Claim 1), as well as Claim 13 (incorporated into Claim 11) and Claim 10 (incorporated into Claims 1, 11, and 18), to further clarify the subject matter being claimed. Accordingly, it is believed that the claims now define patentable subject matter over the prior art cited in the Office Action and notice to such effect is requested at the Examiner's earliest convenience.

Claim Rejections – 35 U.S.C. §103

Claims 1-20 were rejected in the Office Action as being obvious over U.S. Patent No. 6,183,601 to Otto *et al.* in view of U.S. Patent No. 5,738,760 to Svanqvist *et al.* or in view of U.S. Patent No. 6,325,896 to Hullcrantz *et al.* The Applicants traverse these rejections. However, Claims 1, 11, and 18 have been amended to further clarify the subject matter being claimed. Claim 5 has been incorporated into Claim 1, Claim 13 has been incorporated into Claim 11, and Claim 10 has been incorporated into Claims 1, 11, and 18. Claims 5, 10, and 13 have thus been cancelled. The amendments to the claims find support throughout the Specification and the Figures, and no new matter has been added.

Claim 1, as amended, is directed to a dry end section for a paper-making machine for producing a high-bulk tissue. Such a machine comprises a through-air dryer adapted to finally dry a paper web; a through-air drying fabric configured to transport the web through the through-air dryer; a separating device comprising a suction-configured roll for separating the web from the through-air drying fabric, and receiving the web directly thereon from the through-air drying fabric; an air emission arrangement disposed adjacent to the separating device and configured to facilitate separation of the web from the through-air drying fabric; a reel having a reel drum disposed adjacent thereto so as to form a reel-up for receiving

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the web from the separating device, the reel-up being spaced apart from the separating device; and a non-contacting support system disposed in the space between the separating device and the reel-up. The non-contacting support system is configured to receive the web directly from the separating device and to transport the web directly to the reel-up.

Claims 11 and 18, as amended, are directed to a method for making a tissue with enhanced tactile quality and facilitating reel-up of the tissue in a dry end of a tissue paper-making machine. Such a method comprises finally drying a tissue web on a through-air drying fabric with a through air dryer; separating the tissue web from the through-air drying fabric with a separating device comprising a suction-configured roll, and with an air emission arrangement disposed adjacent to the separating device, such that the tissue web is received directly on the separating device from the through-air drying fabric; transporting the tissue web from the separating device directly to a reel nip spaced apart therefrom with a non-contacting support system disposed within the space between the separating device and the reel nip, the reel nip being formed between a reel and a reel drum disposed adjacent thereto; and directing the tissue web through the reel nip so as to wind the tissue web onto the reel.

The Otto '601 patent is explicitly direct to a method of calendering a sheet material web carried by a fabric (Abstract). The Otto '601 patent, in this regard, discloses (FIGS. 1-3) "various schematic diagrams for forming a sheet material web without an open draw" (Col. 3, lines 59-61), wherein "it should be understood by one of skill in the art that the present invention could be used with other forming processes which utilize fabrics and/or helts to carry a sheet material web without an open draw" (Col. 3, line 65 through Col. 4, line 1). As disclosed in FIGS. 1-3, the web 20 is transferred to a through-drying fabric 32, which carries the web 20 over a throughdryer 36. Following the throughdryer 36, the dried web 2 is transferred to a first carrier fabric 40 in a transfer section 50, with the aid of a vacuum transfer roll 42. The web 2 is then sandwiched between the first carrier fabric 40 and a second carrier fabric 60 and directed through a calender nip 90 formed by first and second calender rolls 92, 94, wherein the second carrier fabric 60 carries the web 2 to the winding nip formed between the reel drum 80 and the reel 82, where it is wound into a roll 34.

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FIGS. 5 and 6 of the Otto '601 patent, as cited in the Office Action, disclose a calender stack positioned in a converting or finishing line, wherein, after a dried sheet material web is rolled onto a roll at a winding section, the roll can then be transported to the converting or finishing line for the material to be slit, embossed, calendered, crimped, or otherwise processed. The illustrated converting / finishing lines shown in FIGS. 5 and 6 include an unwinding section 500, a converting and finishing section 520, and a winding section 540, wherein the converting / finishing lines include spaces between the converting / finishing section 520 and the winding section 540.

The Svanqvist '760 patent discloses a method of and device for transferring a running dried web from one device to a subsequent device. In this regard, a web support device 10 extends across the width of the web 4 and along a predetermined run thereof. The web support device 10 has a support surface 11 formed by a series of plate member assemblies 23 configured to provide a flow of air in the direction of the web run. The flow forms an air layer 15 of reduced static pressure between the web 4 and the support surface 11 to stabilize the web against flutter.

The Hultcrantz '896 patent discloses an apparatus for transferring a fast running fibrous web from a first location to a second location, comprising an air foil defining a web support surface that extends substantially continuously between the locations, and includes at least two air supply channels extending substantially perpendicular to the direction of web travel across the air foil for providing flows of pressurized air between the foil and the web, in the direction of travel of the web. A layer of reduced static pressure is thus provided which stabilizes the web against undesirable motion while minimizing dust build-up.

The Office Action alleges that it would have been obvious to use the non-contacting web transfer system as disclosed by either of the Svanqvist '760 and Hultcrantz '896 patents as an alternative to the web transfer system utilized by the throughdrying system disclosed in the Otto '601 patent, because the Svanqvist '760 and Hultcrantz '896 web transfer systems and the Otto '601 web transfer system are "equivalents . . . interchangeable for their desired function." The Office Action also alleges that it would have been obvious to use the non-contacting web transfer system as disclosed by either of the Svanqvist '760 and Hultcrantz '896 patents in the "open draw" of the converting / finishing lines shown in FIGS. 5 and 6 of the Otto '601 patent. In this

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regard, the Office Action further alleges that the throughdrying section of FIGS. 1-3 could be substituted for the unwinding section in FIGS. 5 and 6. The Office Action also alleges that the Otto '601 patent teaches that calendering, though desired, is not required, and that the first and/or second carrier fabrics comprise "a separating device." The Applicants traverse these allegations.

More particularly, the Applicants submit that Claims 1-4, 6-9, 11, 12, and 14-20 are patentable over the cited references. Namely, the Otto '601, Svanqvist '760, and Hultcrantz '896 patents, either separately or in combination, do not teach or suggest a dry end section for a paper-making machine having a through-air dryer, a through-air drying fabric for transporting the web; a separating device comprising a suction-configured roll for separating the web from the through-air drying fabric, and receiving the web directly thereon from the through-air drying fabric; an air emission arrangement disposed adjacent to the separating device and configured to facilitate separation of the web from the through-air drying fabric; a reel having a reel drum disposed adjacent thereto so as to form a reel-up for receiving the web from the separating device, wherein the reel-up is spaced apart from the separating device; and a non-contacting support system disposed in the space between the separating device and the reel-up for receiving the web directly from the separating device and transporting the web directly to the reel-up, or an associated method for making a tissue with enhanced tactile quality and facilitating reel-up of the tissue in a dry end of a tissue paper-making machine.

The Applicants note that the Federal Circuit has consistently stated that a finding of obviousness requires a specific teaching, motivation, or suggestion to combine the teachings of individual items of prior art. See, e.g., *In Re Sang Su Lee*, No. 00-1158 (Fed. Cir. January 18, 2002) (factual question of motivation to combine is material to patentability and could not be resolved on subjective belief and unknown authority); *C.R. Bard, Inc. v. M3 Systems, Inc.*, 157 F.3d 1340, 1352 (Fed. Cir. 1998) (a showing of a suggestion, teaching, or motivation to combine is an essential evidentiary component of an obviousness holding); *In re Fritch*, 972 F.2d 1260, 1265 (Fed. Cir. 1992) (Examiner can satisfy burden of obviousness in light of combination only by showing some objective teaching leading to the combination); and *In re Fine*, 837 F.2d 1071, 1075 (Fed. Cir. 1988) (evidence of teaching or suggestion essential to avoid hindsight).

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In this regard, the Applicants also note that MPEP §2141 explicitly states that, when "applying 35 U.S.C. 103, the following tenets of patent law must be adhered to:

- (A) The claimed invention must be considered as a whole;
- (B) The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination;
- (C) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and
- (D) Reasonable expectation of success is the standard with which obviousness is determined"

Furthermore, in determining the differences between the prior art and the claims, "the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious." MPEP §2141.02, "Basic Considerations Which Apply to Obviousness Rejections," citing *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); *Schenk v. Nortron Corp.*, 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983). (Emphasis added). The teaching or suggestion to make the claimed combination and reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. MPEP §2143 citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Also, "[t]he requirement 'at the time the invention was made' is to avoid impermissible hindsight." MPEP §2141.01(III). In addition, "[a] prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention." *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

In light of these directives provided in the MPEP, the Applicants traverse the allegation in the Office Action that the Svanqvist '760 and Hultcrantz '896 web transfer systems and the Otto '601 web transfer system are "equivalents . . . interchangeable for their desired function," since this does not consider each independent claim as a whole (i.e., the totality of the combination of elements, as recited). Furthermore, such rejections are contrary to the requirement that the teaching or suggestion to make the claimed combination and reasonable expectation of success must both be found in the prior art, and not in applicant's disclosure.

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The Applicants first note that the current divisional application includes only the embodiment shown in FIG. 6 and, as such, the remarks herein are directed thereto. In this regard, the Otto '601 patent discloses an arrangement (FIGS. 1-3) whereby the web is transferred from the throughdryer to the winding nip by the first and/or second transfer fabric. Further, the Otto '601 patent repeatedly states that the invention is directed to an apparatus for calendering a web while the web is being carried on or between one or more carrier fabrics such that at least one fabric accompanies the web passing between a nip formed by adjacent calender rolls (Col. 1, line 64 through Col. 2, line 63). In contrast, the web transfer devices disclosed by the Svanqvist '760 (see, e.g., FIG. 5) and Hultcrantz '896 (see, e.g., FIG. 1) patents are disclosed as being disposed on either side of a calender such that the web is calendered in the nip without an accompanying transfer fabric. Thus, the Otto '601 patent requires the web to be supported by at least one transfer fabric through the calender, and does not allow the alternate implementation the web transfer devices of the Svanqvist '760 and Hultcrantz '896 patents, which calender the web without the use of a transfer fabric. Therefore, the Svanqvist '760 and Hultcrantz '896 patents teach away from a combination with the Otto '601 patent, since the Otto '601 patent requires the web to be supported by at least one transfer fabric through the calender. Further, the Otto '601 patent, through this requirement, also teaches away from implementing a non-contacting transfer device as disclosed by the Svanqvist '760 and Hultcrantz '896 patents. As such, the Svanqvist '760 and Hultcrantz '896 web transfer systems and the Otto '601 web transfer system are not "equivalents . . . interchangeable for their desired function," as alleged in the Office Action.

The Otto '601 patent also explicitly states that the invention is directed to forming processes which utilize fabrics and/or belts to carry a sheet material web without an open draw (Col. 3, line 65 through Col. 4, line 1), and such configurations are clearly shown in FIGS. 1-3 of the Otto '601 patent. That is, the Otto '601 patent indicates that, if the configurations shown in FIGS. 1-3 were to include an open draw, the web would be supported by a fabric and/or belt. Accordingly, for this reason, the Applicant further traverses the allegation in the Advisory Action that "if for the physical limitations/position of the different devices of the plant, the web needs to be carried to the reel-up section, the unsupported transferring/guiding of the web as taught by the secondary references would have been obvious to one of ordinary skill

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in the art," because the Otto '601 patent specifically notes that a fabric and/or belt would be used in those instances to support the web. The Applicant also submits that MPEP §2143.01 particularly notes that the ordinary skill in the art cannot be relied upon to sustain an obviousness rejection without an objective reason to combine the references, and this allegation in the Advisory Action is reading teachings of an open draw into the Otto '601 patent which are not present in that reference. Indeed, the Otto '601 patent specifically teaches that the disclosed embodiments do not include an open draw, as the web is supported by a fabric and/or belt throughout the process.

The Otto '601 patent further notes that the disclosed throughdrying configuration can be alternatively configured such that the web can be transferred directly from the throughdrying fabric to the reel drum using vacuum suction from within the reel drum or pressurized air, wherein the web is then wound into a roll on a reel. In another configuration disclosed by the Otto '601 patent, "a vacuum drum is used to transfer the web from the throughdrying fabric and to thereafter pass the web on to a reel drum for winding into a roll on the wind-up reel." The Applicants submit that neither of these two alternative arrangements teaches or suggests that calendering is optional, as alleged in the Office Action. Further, the Applicants submit that neither of these two alternative arrangements includes free draw between the throughdrying fabric and the reel-up, as alleged in the Advisory Action.

With regard to the first alternative arrangement, the web transfer devices as disclosed by the Svanqvist '760 and Hultcrantz '896 patents would not be necessary, since the web is transferred from the throughdrying fabric 32 directly to the reel drum 80, to be wound into a roll on the reel 82. That is, the reel drum 80 would have to be immediately adjacent to the throughdrying fabric 32 to be transferred from the throughdrying fabric 32 to the reel drum 80 as a result of the vacuum therein. This is consistent with the stated direction of the Otto '601 patent, which specifically states that the disclosed embodiments do not include an open draw, or require a fabric and/or belt to carry the web in the event of an open draw.

Accordingly, the first alternative configuration of the Otto '601 patent would not include any free draw between the throughdrying fabric and the reel-up in which to implement the web transfer devices as disclosed by the Svanqvist '760 and Hultcrantz '896 patents. That is, in order

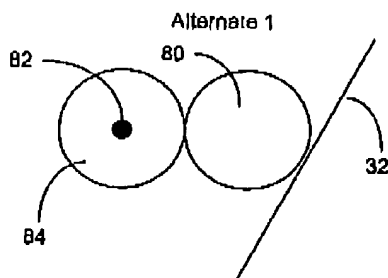
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for the first alternative arrangement to be consistent with the disclosure of the Otto '601 patent, the first alternative arrangement would have to be configured as follows:



Thus, the first alternative arrangement of the Otto '601 patent does not teach or suggest a reel-up spaced apart from the separating device, wherein a non-contacting support system is disposed in the space between the separating device and the reel-up for receiving the web directly from the separating device and transporting the web directly to the reel-up, as particularly recited in the claims now pending.

The second alternative arrangement disclosed by the Otto '601 patent recites the web as being transferred from the throughdrying fabric 32 by a vacuum drum 42 and then "passed on to" a reel drum 80 for winding into a roll on the wind-up reel 82. The Otto '601 patent does not indicate, whether in the Specification or in the Figures, the relationship between the vacuum drum 42 and the reel drum 80 in the second alternative arrangement. In this regard, though, the Otto '601 patent does not explicitly teach that the vacuum drum 42 is spaced apart from the reel drum 80. However, in order to be consistent with the stated direction of the Otto '601 patent, a fabric and/or belt would be required in the event of an open draw, in order to carry the web, and the second alternative arrangement does not describe the use of a fabric and/or belt for supporting the web. As such, the Applicant also traverses the allegation in the Advisory Action that the throughdrier and the reel-up must be separated by free draw in the second alternative arrangement or else be the same as the first alternative arrangement. That is, in order for the second alternative arrangement to be consistent with the disclosure of the Otto '601 patent, the second alternative arrangement would not include any free draw between the throughdrying fabric and the reel-up in which to

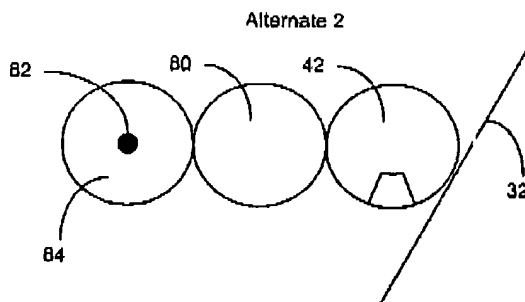
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implement the web transfer devices as disclosed by the Svanqvist '760 and Hultcrantz '896 patents, and would have to be configured as follows:



Thus, the second alternative arrangement of the Otto '601 patent does not teach a reel-up spaced apart from the separating device, wherein a non-contacting support system is disposed in the space between the separating device and the reel-up for receiving the web directly from the separating device and transporting the web directly to the reel-up, as particularly recited in the claims now pending.

As discussed with Examiner Fortuna in the telephone interview, FIGS. 5 and 6 of the Otto '601 patent, as particularly cited in the Office Action, disclose a calender stack positioned in a converting or finishing line. In this regard, the Otto '601 patent notes that, after a dried sheet material web is rolled onto a roll at a winding section, the roll can then be transported to the converting or finishing line for the material to be slit, embossed, calendered, crimped, or otherwise processed. That is, the converting / finishing line is a separate and discrete apparatus (i.e., offline) from the papermaking machine shown in FIGS. 1-3. Accordingly, FIGS. 5 and 6 do not provide any indication as to whether a calender stack is optional in the papermaking machine configurations shown in FIGS. 1-3, contrary to the allegations in the Advisory Action. Further, the throughdrying section of FIGS. 1-3 cannot merely be substituted for the unwinding section 500 shown in FIGS. 5 and 6. Further, even though the Otto '601 patent particularly notes that the calendar stack is not optional with respect to FIGS. 5 and 6, the converting / finishing line would still include a converting and finishing section 520 using at least one transfer belt for supporting the web. Even further, the transfer belt in the converting and finishing section 520 of FIGS. 5 and 6, in and of itself, does not comprise a "separating device for separating the web from the through-air drying

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“fabric and receiving the web directly thereon” much less “a separating device comprising a suction-configured roll for separating the web from the through-air drying fabric, and receiving the web directly thereon from the through-air drying fabric” as now claimed.

That is, in any case, the converting / finishing lines of FIGS. 5 and 6 of the Otto '601 patent do not include a separating device as recited in the claims now pending. Accordingly, FIGS. 5 and 6 do not disclose a separating device being spaced apart from a reel-up, as now claimed.

The Applicant finally traverses the allegation in the Advisory Action that “using an unsupported guiding system, as taught by the secondary references, in the primary reference configuration would have been obvious to one of ordinary skill in the art,” because such an allegation completely ignores the teachings of the primary reference and the directives of the MPEP, namely MPEP §2141 (when “applying 35 U.S.C. 103, the following tenets of patent law must be adhered to: (A) The claimed invention must be considered as a whole; (B) The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination; (C) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and (D) Reasonable expectation of success is the standard with which obviousness is determined”); MPEP §2141.02 (in determining the differences between the prior art and the claims, “the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious.”); MPEP §2143 (The teaching or suggestion to make the claimed combination and reasonable expectation of success must both be found in the prior art, not in applicant's disclosure.); and MPEP §2141.01(II) (“[a] prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention.”).

Thus, in view of these differences between embodiments of the present invention, as now particularly claimed in Claims 1, 11, and 18, and the Otto '601, Svanqvist '760, and Hultcrantz '896 patents, either separately or in combination, the Applicants submit that Claims 1-4, 6-9, 11, 12, and 14-20 are patentable over the Otto '601, Svanqvist '760, and Hultcrantz '896 patents cited in the Office Action.

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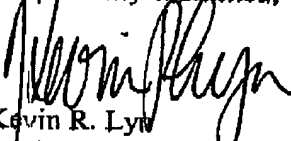
CONCLUSION

In summary, the Otto '601, Svanqvist '760, and Hultcrantz '896 patents, either separately or in combination, do not teach, suggest, or provide motivation for embodiments of the present invention, as now claimed in Claims 1, 11, and 18, because the Otto '601 patent, and the Svanqvist '760 and Hultcrantz '896 patents, do not teach the combination as alleged in the Office Action or the Advisory Action. Accordingly, in view of these differences between the Applicant's invention and the Otto '601, Svanqvist '760, and Hultcrantz '896 patents, it is submitted that the present invention, as defined by the pending claims, is patentable over the prior art cited in the Office Action. As such, Claims 1-4, 6-9, 11, 12, and 14-20 are believed to be in condition for immediate allowance.

In conclusion, for the reasons set forth above, the Applicant submits that all claims now pending are in condition for immediate allowance. Accordingly, notice to such effect is respectfully requested at the Examiner's earliest opportunity.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR §1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,


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CERTIFICATION OF FACSIMILE TRANSMISSION

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3/22/06

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